

hon. medical officer to the Mansion House Council. Mr. Cooke ordered the necessary repairs to be done at once, and allowed the complainant two guineas costs. We have no means of ascertaining whether the strong allegations of Mr. Lazarus in regard to the St. Pancras Vestry are well founded; but experience, gained in almost every part of the country, leads us to fear that they may be. It is difficult to see how the evil can be entirely cured except by conferring more stringent powers and duties upon the Local Government Board. But each district might easily protect its poorer inhabitants by refusing to elect to office anyone to whom the slightest suspicion attached. It is the apathy of the public more than the defects of the system which leads to such scandals as that now alleged.

#### THE INFLUENCE OF GASTRIC JUICE ON PATHOGENIC GERMS.

Drs. KURLOW and WAGNER, in a paper on the Influence of Gastric Juice on Pathogenic Germs, which they publish in the *Vratch*, describe some interesting experiments which they have made on this subject, from which they are led to the conclusion that constant or specific microbes do not exist in the stomach, and those which enter it, together with sputum, food, or other ingesta, are only accidental and temporary residents, and cannot live in the normally acid contents of the stomach. Gastric juice is, according to the authors' experiments, an exceedingly strong germicidal agent, and when living bacilli get into the intestinal canal it is due to various conditions entirely independent of the gastric juice. When the latter is normal and in full activity, only the most prolific microbes, such as tubercle bacilli, the bacilli of anthrax, and perhaps the staphylococci, escape its destructive action; all others are destroyed in less than half an hour. Similar influences exist in the intestines, as proved by inoculations with the cholera bacilli. On the latter subject the authors intend making further experiments.

#### "VISUALISED IMAGES PRODUCED BY MUSIC."

AN interesting letter appears in *Nature* of March 6th bearing this title, and it would be doubly interesting if it could be shown to be not of exceptional occurrence. The subject is a lady who is in perfect health, and is stated by the friend who makes the communication to be very intelligent, an accomplished musician, and not at all in this or any sense the victim of a disordered imagination. She has observed that the sound of an oboe brings before her a white pyramid or obelisk running into a sharp point, the point becoming more acute if the note is acute, blunter if it is grave. The obelisk appears to be sharply defined and solid if the note is loud, and vague and vaporous if it is faint. All the notes of the violoncello, the high notes of the bassoon, trumpet, and trombone, and the low notes of the clarinet and viola make her see a flat undulating ribbon of strong white fibres. The tone of the horn brings before her a succession of white circles of regularly graduated size, overlapping each other. These circles and the ribbon float past her horizontally, but the point of the obelisk seems to come at her. In an orchestra, when the violins strike up after the wind instruments have been prominent for a time, she often, but not always, sees a shower of bright white dust or sand, very crisp and glittering. The recurrence of this impression is, she thinks, becoming more frequent, but it is not invariable, like the others. The subject of this curious association of senses has heard a great deal of orchestral music all her life, but she has only noticed these effects for four or five years. They have gained gradually in frequency and clearness, and the first three are now invariable. If she knows the scoring of a piece well, the various effects slightly precede the

instrument they belong to, only the objects are vague and faint till the sound begins. Sometimes, if an oboe passage has an intense and yearning character, the white point approaches so closely and moves so rapidly that she thinks it must wound her. She expressly remarks that in the above statements she is not trying to describe a mental state by symbols, but that she actually sees the point, the fibres, and the circles. Generally they seem to float half-way between her and the orchestra. If only one class of instruments is used, the effect does not extend beyond the opening bars, so that in a string quartette, for example, she only sees the white sand for a moment at the beginning. If, however, the wind and stringed instruments are combined, she sees the various effects again and again in one piece.

#### THE DRAINAGE OF LONDON.

AT the meeting of the London County Council on March 18th the Main Drainage Committee reported that they had received tenders for carrying the sludge to sea for one year, commencing on April 1st, 1890; but, upon examination of these tenders, it had not appeared to the committee that they could recommend the acceptance of any one of them, the payment demanded per ton being much in excess of the cost at which the work of discharging the sewage sludge at sea was now carried on. In these circumstances the committee were considering the possibility of making arrangements for the more continuous working of the sludge ships, and also for the hire of auxiliary vessels for carrying away and discharging at sea any amount of sludge beyond that which the two vessels, the *Bazalgette* and the *Barking*, could remove.

#### THYROID GRAFTING.

IT is only a few weeks since Professor Horsley, encouraged by the experiments of von Eiselsberg, suggested that the progress of myxœdema might be arrested by transplantation (into the peritoneal cavity) of a portion of the thyroid gland of the sheep. Von Eiselsberg had shown that the transplanted thyroid was capable of becoming vascularised in its new situation, and of continuing its function, since out of nine animals from which he extirpated one lobe, having previously transplanted the other into the mesentery or subperitoneal tissue, the only one which did not exhibit symptoms characteristic of total ablation was that animal in which the transplanted lobe had neither necrosed nor degenerated. The proposal of Professor Horsley—which was certainly remarkable—has actually been put in practice by M. Lannelongue, who reported his case at a meeting of the Paris Biological Society on the 7th inst. The subject was a myxœdematous cretin, fourteen years of age. About two-thirds of the left lobe of the thyroid was removed from a young adult sheep, and transplanted into the subcutaneous tissue of the child's chest, below the right breast, it being found impossible to insert it in the neck owing to the presence of large "myxœdematous tumours" in that region. The capsule of the transplanted organ was removed before embedding it at a depth of three centimetres from the skin. The operation was aseptic, and the wound united without fever or suppuration. Whether any appreciable result will follow remains to be seen, but M. Lannelongue believes that the grafting has succeeded. M. Chauveau thought it probable that the engrafted thyroid would be absorbed, and stated that it was an easy matter to engraft a sheep's testicle in subcutaneous tissue, but that the organ was gradually destroyed. Superficial capillary adhesions, he said, do not suffice to maintain the vitality of the transplanted organ; large vessels are needed for this purpose. M. Dastre also pointed out that the observation of P. Bert (1863) showed that engrafted tissues are generally

absorbed, although the case of a vascular gland like the thyroid might be different. M. Lannelongue urged that animals in whom the thyroid had been transplanted into the abdomen escaped the usual consequences—cachexia strumipriva—of ablation of the gland. M. Pouchet pointed to the difficulty of obtaining the thyroid of the same species of animal, a point, it may be remembered, raised by Professor Horsley, who, however, has shown that the thyroid of the sheep most closely resembles that of man.

### HORSE-SHOEING.

At the Royal United Service Institution a paper was read last week by Dr. Fleming, the principal veterinary surgeon of the army, on "The Shoeing of Horses for Military Purposes." After some remarks on the practical importance of shoeing and a brief historical sketch of it, Dr. Fleming adverted to the erroneous principles on which, until within the last few years, it was carried out, and the unmerciful manner in which the horses' feet were treated. "Mistaken ideas as to the functions of the foot, and especially of its protection, the hoof, led to the latter being considered as something inimical to the animal's welfare. It was therefore barbarously mutilated, and only too often is so yet outside our army; while the shoe attached to it was clumsy and damaging in the extreme." He then proceeded to detail the improvements which had been introduced into the army by the adoption of machine-made shoes, cold shoeing, the instruction of a number of men in the ranks to put on shoes, the training of the farriers to assist in the horse infirmaries, and in fact to perform with regard to horses the duties discharged by men of the Army Hospital Corps in the military hospitals. This system has been in operation for the last three or four years, and has been attended with the most satisfactory results. It has permitted of a great reduction in the amount of the transport formerly necessary for the work of the farriers on field service; the shoes have been found to be better shaped and finished than the old hand-made ones, the labour of shoeing has been greatly reduced, and the time required much shortened; while the cruelty to the horse involved in the cutting of the hoof to fit the shoe, instead of making the shoe to fit the hoof, and the application of the hot iron to supplement the cutting in getting a fit, has been abolished. The advantages of the new pattern machine-made shoe are stated to be: (1) Solidity of attachment to the hoof; (2) security of foothold; (3) soundness of the foot. The system now in operation has also the advantage of providing a sufficient number of qualified shoers on service, and of trained veterinary hospital assistants to the officers in charge of the sick horses. These are two classes of which the want, or at best the very inadequate supply, has hitherto seriously affected the efficiency of troops in the field. Dr. Fleming stated that this system has been introduced not merely without increased expense, but with such a saving as will enable a more adequate establishment of hospital assistants to be maintained. He also brought to notice the advantages of the mode of winter shoeing with "steel pegs of a pyramidal shape fitting into square holes in the shoes," in lieu of the old and injurious and not very efficient method of "roughing." "It is so inexpensive that for a few pence a horse can travel securely at any pace on ice for a month, and it is so simple and readily applied that the horses of a whole army corps can be prepared for marching on the most slippery roads within half an hour." He stated that so far as it had been tried in the army it had been attended with success, and that this had also been the result in the Swiss army, in which the system had been adopted. He thinks it "a matter for regret in towns which have slippery roads all the

year advantage cannot be taken of a simple plan like this to economise horses' powers and spare them distress, fear, and injury. It is very painful to pass along some of our streets and witness the amount of horse torture, and loss of power that occurs during certain states of weather, and it certainly does not say much for the common sense or humanity of those who shoe the horses or construct the roadways." In the discussion which followed, several officers of the Veterinary Department bore testimony to the satisfactory results which had been obtained by cold shoeing on service, and also at the autumn manœuvres. The chairman, General Sir Beauchamp Walker, K.C.B., endorsed all that Dr. Fleming had said, and called attention to another improvement which had been introduced—the reduction in the number of nails used in shoeing, four or five being now found sufficient. He regretted that no cavalry officer had offered any opinion on the subjects treated in Dr. Fleming's valuable and profitable lecture. The absence of officers of that branch of the service when a subject of so much importance to it was to be discussed must, we fear, be taken as indicating a very small amount of zeal on their part or of interest in the practical welfare of the cavalry.

### PORRO'S OPERATION.

ON Thursday, the 13th inst., Dr. Cullingworth performed Porro's operation at St. Thomas's Hospital. The patient was thirty years old, the subject of rickety deformity and contraction of the pelvis, and was only 3 ft. 9½ in. in height. Craniotomy (at full term) was required in 1887, during the first pregnancy, and in 1888 labour was induced at the seventh month. On the present occasion no attempt had been made to induce labour, nor was it in progress. Dr. Cullingworth had intended to perform the Cæsarean section, with removal of the appendages; but the uterus failed to contract after suture of the incision, and, as the hæmorrhage continued to a considerable extent, it was decided to remove the uterus also. This was done above a *serre-nœud*, in the usual manner. The hæmorrhage had come from a large sinus in the incision, and not from the placental site. The patient rallied well after the operation. Next morning the pulse was 150 and the temperature 101°. Since that time, with the exception of slight attacks of vomiting and flatus, the patient has progressed satisfactorily. The child, a healthy female, weighing 6 lb. 4 oz., has continued well. In the same ward are two cases of successful extirpation of the uterus for malignant disease of the cervix, which with two other cases operated on last year will form the subject of a paper to be read at the next meeting of the Obstetrical Society.

### THE IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE Irish Graduates' Association met for their annual dinner on St. Patrick's Day at St. James's Restaurant. The Association continues to grow, and has now about 500 members—sixty-five have been added in the last year. It was expected that Dr. George H. Kidd, the President, would occupy the chair, but he was prevented from doing so, and at his request Sir Walter Foster presided. Reference was made in the course of the evening to the action taken by the Council of the Association with respect to the question of the exclusion of Irish diplomates from hospital appointments in England; also to the proposed formation of branches of the Association. All regretted the absence of Dr. Kidd, but Sir Walter Foster ably and genially discharged his duties. His proposal of the health of Her Majesty was in admirable taste and warmly responded to. The guests were numerous, and included Lieutenant Stairs, Sir Thomas Vine, M. du Chaillu, Mr. Thaddeus, and